STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Ameren Illinois Company	:	
Proposed general increase in electric delivery service rates	:	Docket No. 11-0279 (Cons.)
Proposed general increase in gas delivery service rates.	:	Docket No. 11-0282

Direct Testimony of
Scott J. Rubin

on Behalf of
the People of the State of Illinois and
the Citizens Utility Board

AG/CUB Exhibit 2.0

June 29, 2011

Table of Contents

I. Introduction and Summary

Q. Please state your name and business address.

A. My name is Scott J. Rubin. My business address is 333 Oak Lane, Bloomsburg, Pennsylvania 17815.

Q. By whom are you employed and in what capacity?

A. I am an independent consultant and an attorney. My practice is limited to matters affecting the public utility industry.

Q. What is the purpose of your testimony in this case?

A. I have been asked by the Office of Attorney General ("AG") and the Citizens Utility Board ("CUB") to review the portions of the direct testimony and exhibits filed by Ameren Illinois Company ("Ameren" or "Company") as they relate to the gas and electric cost-of-service studies ("COSS") and residential rate designs.

Q. What are your qualifications to provide this testimony in this case?

A. I have testified as an expert witness before utility commissions or courts in the District of Columbia and in the states of Arizona, California, Connecticut, Delaware, Kentucky, Illinois, Maine, Maryland, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert witness before two committees of the U.S. House of Representatives and one committee of the Pennsylvania House of Representatives. I also have served as a consultant to the Connecticut Department of Public Utility Control, several national utility trade associations, and state and local

governments throughout the country. Prior to establishing my own consulting and law practice, I was employed by the Pennsylvania Office of Consumer Advocate (OCA) from 1983 through January 1994 in increasingly responsible positions. From 1990 until I left the OCA, I was one of two senior attorneys in that Office. Among my other responsibilities in that position, I had a major role in setting the OCA's policy positions on water and electric matters. In addition, I was responsible for supervising the technical staff of that Office. I also testified as an expert witness for that Office on rate design and cost of service issues.

Throughout my career, I developed substantial expertise in matters relating to the economic regulation of public utilities. I have published articles, contributed to books, written speeches, and delivered numerous presentations, on both the national and state level, relating to regulatory issues. I have attended numerous continuing education courses involving the utility industry. I also periodically participate as a faculty member in utility-related educational programs for the Institute for Public Utilities at Michigan State University, the American Water Works Association, and the Pennsylvania Bar Institute.

Q. Do you have any experience that is particularly relevant to the issues in this case?

A. Yes, I do. I have testified on numerous occasions as a rate design and cost of service expert. I have been the rate design and cost of service witness for the AG and/or CUB in previous cases involving Ameren, as well as other Illinois utilities, including

Commonwealth Edison Company, Northern Illinois Gas Company (Nicor), Peoples Gas, and Illinois-American Water Company.

Q. What documents have you reviewed in preparing this testimony?

A. I have reviewed the portions of the Company's filing, testimony, and responses to data requests that concern the COSS and residential rate design issues in both the electric and gas cases.

Q. Please summarize your conclusions and recommendations.

A. I summarize my testimony concerning electric distribution issues as follows:

- I support Ameren's proposal to limit any class's base rate increase to no more than 1.5 times the system-average percentage increase, but Ameren did not properly apply this limitation in its filing. The base rate increase to the DS-4 class should be approximately 11.0 percent, not 4.9% as proposed by Ameren.

- The DS-1 and DS-2 classes should receive base rate increases sufficient to bring their revenues to the cost of service. Ameren erred by proposing rates for those classes that would recover revenues in excess of the cost of service.

- At the conclusion of this case, Ameren should recover from every customer its actual cost per kilowatt-hour for the Illinois Electric Distribution Tax, which the Company projects to be $0.0012936 per kilowatt-hour. Ameren's proposal to phase in this tax rate over three more years should be rejected. Small customers have been subsidizing this tax for large users for several years and it is time to end that subsidy.

- Even if the Commission agrees with Ameren's proposed three-year phase-in of the fair collection of this tax, Ameren's proposal should be modified to eliminate Ameren's proposed substantial rate increase for small Rate Zone II customers who already are paying a tax rate in excess of the proper rate. Customers whose rates already exceed the proper tax rate should not receive any rate increase as part of a phase-in plan.

- Ameren's DS-1 customer charge should not be increased in this case because the existing rates already exceed Ameren's proposed customer-related cost of service. Any rate increase recoverable from residential customers should be recovered through increases in distribution charges.

I summarize my testimony concerning natural gas distribution issues as follows:

- The Commission should reject Ameren's proposal to recover 80% of its residential revenue requirement through the residential (GDS-1) customer charge.

- Ameren's existing rates fail to recover demand-related costs in relationship to residential customers' contribution to that demand. As such, the rates are not cost-based and discriminate against low-use customers.

- Any rate increase allocable to residential gas customers should be recovered through increases in the per-therm distribution charges.

II. Electric Distribution Rates

A. Inter-Class Allocation Issues

Q. How does Ameren propose to allocate its electric distribution revenue requirement among the customer classes?

A. Ameren proposes to begin with the results of its COSS, but then impose a constraint. Specifically, Ameren proposes to limit the increase to any customer class to no more than 1.5 times the system-average rate increase. Ameren Ex. 13.0E, page 8, lines 172-173.

Q. Do you support the use of a constraint that limits the increase to any customer class to no more than 1.5 times the system average increase?

A. Yes, I do. I have testified in support of a similar type of constraint on many occasions, because in my opinion it is a reasonable way to move toward rates that recover each

class's cost of service while remaining sensitive to the impacts that dramatic rate changes can have on customers. This constraint also recognizes that a COSS is not an exact science, but contains many assumptions and estimates that could vary somewhat from one case to another.

Q. Has Ameren properly implemented this 1.5 times constraint?

A. No, it has not. Ameren's COSS shows that the cost to serve the DS-4 class, excluding the Illinois Electric Distribution Tax ("IEDT"), is $65,246,000. Present base rates for the DS-4 class recover $54,512,000. To bring the class's base rates up to the cost of service would require an increase of 20.0%, which exceeds the 1.5 times average limit (which equates to an increase of 11.0%). Thus, base rates for the DS-4 class should be increased by approximately 11.0%, which would bring revenues for the class to approximately $60,481,000 – still almost $5 million below cost. But Ameren has proposed to increase DS-4's base revenues to only $57,169,000; an increase of just 4.9%, which is less than the system-average increase, and more than $8 million below cost. I show all of these figures on AG/CUB Ex. 2.1.

Q. Why did Ameren make this proposal when it said it was using a limit of 1.5 times the average increase?

A. It appears that Ameren used this limit on the combined effect of base rates and the IEDT. As I discuss later in this testimony, the IEDT is a completely separate issue and should have no effect on the base rate revenues that are allocated to each class. Indeed, Ameren's COSS also excluded the IEDT. As I show on AG/CUB Ex. 2.1, the total

revenues from the COSS are $875,981,000, which matches Ameren's proposed base rate revenues from sales to the DS-1 through DS-5 classes.

Q. Do you support Ameren's proposed inter-class allocation for electric distribution?

A. No, I do not. In addition to Ameren understating the appropriate increase for the DS-4 class, Ameren also erred in allocating revenue responsibility to the other classes. Ameren's COSS shows that the existing revenues received from two customer classes, DS-3 and DS-5, are in excess of Ameren's proposed cost of serving those classes. Ameren proposes, therefore, to reduce the rates for those classes while at the same time increasing DS-1 and DS-2 rates to more than the cost to serve those classes. In fact, Ameren's proposal would reduce DS-3 rates to below the cost of serving that class, as shown on AG/CUB Ex. 2.1. In effect, DS-1 and DS-2 are being asked to subsidize the rate reductions for DS-3 and DS-5. I disagree with this aspect of Ameren's proposal.

Q. What do you recommend?

A. I recommend that the base rate increase for DS-4 should be limited to 1.5 times the system average increase. I also recommend that the revenues for the DS-1 and DS-2 classes should be brought to the cost of serving each class. This still would generate revenues in excess of Ameren's revenue requirement, so the rates for DS-3 and DS-5 should then be reduced so that both classes are providing revenues that are approximately the same percentage above the cost of service.

Q. Please compare Ameren's proposed inter-class allocation with your proposed inter-class allocation.

A. AG/CUB Ex. 2.1 shows the results of Ameren's COSS, Ameren's proposed allocation, and my proposal (as described above). The effect of my proposal is to set the rates for DS-1 and DS-2 equal to their costs of service and still provide rate reductions for the DS-3 and DS-5 classes. In my opinion, this approach is more reasonable than Ameren's proposed inter-class revenue allocation for electric distribution service.

B. Illinois Electric Distribution Tax

Q. Do the revenues you show in AG/CUB Ex. 2.1 include revenues collected to pay the Illinois Electric Distribution Tax?

A. No, IEDT revenues are not included in that exhibit.

Q. How much additional revenue does Ameren need to recover from customers to pay the IEDT?

A. Ameren witness Jones states that the Company needs to recover an additional $49,393,467 to pay the IEDT. Ameren Ex. 13.0E, page 18, lines 377-383. Under present rates, the Company collects $44,142,270 in revenues from its customers to pay the tax, so a further increase is required, according to Mr. Jones.

Q. How is the tax imposed on Ameren?

A. The tax is imposed on each kilowatt-hour ("KWH") sold by the Company. Mr. Jones calculates the effective tax rate to be $0.0012936 per KWH. Id., page 18, lines 386-387.

Q. Does Ameren propose to levy this charge on each KWH sold?

A. No, it does not. Ameren's current rates require residential and small commercial customers to subsidize the taxes due on KWH sold to large commercial and industrial customers. Mr. Jones shows that under present rates many DS-1 and DS-2 customers are paying 50% more than the required tax rate, while many DS-3, DS-4, and DS-5 customers are paying substantially less than the actual tax rate (in some cases 98% less than the actual tax rate). Id., page 20, table following line 420. Ameren proposes to phase out this subsidy over a three-year period.

Q. Do you agree with phasing out this subsidy over a three-year period?

A. No, I do not. In my opinion, it is unreasonable to require any customer to subsidize another customer when it comes to paying a state-mandated tax. Illinois's lawmakers have decided to impose a tax on each KWH sold in the state. Within one utility, there is no reason why any KWH should be treated differently than any other KWH for purposes of this tax. I recommend, therefore, that effective with rates going into effect in this case, all KWH sold by Ameren should pay the same IEDT rate. According to Mr. Jones's calculations, that rate will be $0.0012936 per KWH. Id., page 18, lines 386-387.

Q. If the Commission disagrees with you and accepts the Company's proposed three-year phased elimination of the subsidies, do you have any concerns with the specific rates to be charged?

A. Yes, I do. At the present time, all DS-1 customers pay an IEDT rate that is in excess of the proper rate per KWH; however, the DS-1 rate is not the same in all rate zones.

Specifically, in Rate Zone I residential customers are paying $0.00196 per KWH, in Rate Zone II they are paying $0.00136 per KWH, and in Rate Zone III they are paying $0.00197 per KWH.

Ameren proposes to put most customers in a rate zone on the same IEDT rate. This has the effect of greatly increasing the rate paid by Rate Zone II DS-1 customers in year 1 of the phase-in, then reducing that rate in years 2 and 3 to eventually arrive at a rate that is less than the current rate. This is completely illogical – there is no reason to greatly increase a rate that already is above cost, only to reduce it in the following two years.

In particular, Rate Zone II DS-1 customers currently pay an IEDT charge of $0.00136. Ameren Ex. 13.3E, page 1, line 16. Ameren proposes to increase that rate by 34% to $0.0018249 in year 1. Id. Then in years 2 and 3, Ameren would reduce the rate (see Ameren Ex. 13.0E, page 22). In year 2, though, the rate still would be higher than the existing rate in Rate Zone II – even though that existing rate already exceeds the appropriate charge.

If the Commission decides to adopt a phased approach to eliminating the IEDT subsidy, I recommend that customers who are currently paying rates in excess of the IEDT cost should have that rate gradually reduced. Customers already paying above-cost rates should not see that rate increased only to be reduced in the following two years.

I would emphasize, though, that my primary recommendation is for the Commission to eliminate the IEDT subsidies at the conclusion of this case.

C. Residential Rate Design for Electric Distribution Service

Q. Please summarize your understanding of Ameren's present residential rate structure for electric distribution service.

A. Ameren has three rate zones for electric distribution service. Zone I is the former CIPS system (including a separate rate for Metro East, formerly known as CIPS-ME); Zone II is the former CILCO system; and Zone III is the former IP system.

The monthly customer charge is the same for residential customers in all three rate zones. Currently that rate is $12.28 per month. Similarly, all rate zones also pay the same monthly residential meter charge, which is $4.72 per month. Thus, under present rates, the minimum bill for a residential customer is $17.00 per month.

The distribution charge (or per-KWH charge) is different in each rate zone, based on differences in the cost of service when each zone was a separate utility. The distribution rates in each zone are higher in the summer than in the non-summer months. Further, each zone has a two-block rate in the non-summer months, with a lower rate in effect for consumption in excess of 800 KWH per month. This lower rate is designed to recognize the differences in the cost of serving customers who use electricity for space heating.

Q. How does Ameren propose to change residential rates for electric distribution service?

A. Ameren proposes to increase the customer charge to $15.55 per month (a 26.6% increase) and reduce the meter charge to $4.45 per month (a 5.7% decrease). When combined,

these changes would result in a residential minimum bill of $20.00 per month, which is approximately 17.6% higher than the minimum charge under present rates.

Because the overall residential increase proposed by Ameren is approximately 10.3%, Ameren proposes smaller than average increases in the residential per-KWH distribution charges. Specifically, Ameren proposes to increase per-KWH charges in Zone I by 8.7%, those in Zone II by 3.9%, and those in Zone III by 2.7%. Ameren Ex. 13.3E, page 1.

Q. Is Ameren's proposed DS-1 customer charge of $15.55 per month based on the customer-related cost of providing service?

A. No, it is not. According to Ameren's COSS, its total customer-related cost is $230,514,000. Ameren electronic COSS, Functions tab, row 1187. For ease of reference, I have reproduced the data from this line of the COSS on AG/CUB Ex. 2.2. This customer-related cost is shown on line 4 of my exhibit. Of that amount, $72,878,000 is the revenue requirement associated with metering which is recovered through the separate meter charge. AG/CUB Ex. 2.2, line 10. This leaves $157,636,000 in customer-related cost to be recovered through the customer charge. Id., line 16. Ameren's COSS also shows that it has an average of 1,231,674 customers. Ameren electronic COSS, Functions tab, row 1208 (also on Ameren Ex. 13.2, page 1). Dividing the customer-related cost by the number of customers, and then dividing by 12 months, leads to average customer-related cost of only $10.67 per customer per month.

Moreover, even this cost ($10.67 per month) is too much to collect through a customer charge. This amount includes 100% of Ameren's uncollectibles expense, or $9,296,000. AG/CUB Ex. 2.2, line 13. Uncollectibles expense should be recovered in proportion to a customer's total bill, not in an equal amount per customer. If uncollectibles were removed, the proper, cost-based customer charge would be approximately $10.05 per month. That amount then would be increased approximately 10 cents to recover a portion of uncollectibles expense. A reasonable, cost-based customer charge, therefore, would be approximately $10.15 per month, but certainly no more than $10.67 per month.

Q. What do you recommend?

A. I recommend that there should be no increase in Ameren's existing customer charge of $12.28 per month. That charge already exceeds by a substantial amount the customer-related cost under Ameren's proposed revenue requirement. There is no reason to further increase a charge that already greatly exceeds the cost of service.

I recommend, therefore, that any increase allocable to the DS-1 class should be recovered solely through increases in the per-KWH distribution charges, following the basic approach outlined by Mr. Jones. Ameren Ex. 13.0E, pages 31-32, lines 635-649.

Q. Have you prepared an example showing the effect of your cost allocation and rate design recommendations on DS-1 rates?

A. Yes. AG/CUB Ex. 2.3 shows the residential rates I would recommend under Ameren's proposed revenue requirement. I have performed these calculations using the Company's

proposed revenue requirements, so that my recommendations can be compared directly with Ameren's recommendations. This does not constitute an endorsement by me or the AG or CUB of Ameren's proposed revenue requirement. That exhibit also shows a proof of revenues demonstrating that the rates would recover the revenue requirement properly allocable to the DS-1 class, as I showed on AG/CUB Ex. 2.1.

III. Natural Gas Distribution Rates

A. So-Called "Fixed" Costs

Q. Ameren refers to "fixed" costs throughout its natural gas rate design testimony. How has the Company used that term and do you agree with its definition?

A. The Company apparently refers to "fixed" costs to mean costs that do not vary in the short-term as the throughput of gas changes. Under this definition, essentially all of the Companies' costs are "fixed." I strongly disagree with this definition. The standard economic definition of a "fixed" cost is one "whose quantity cannot be changed during the period under consideration."[1] The relevant period for determining whether a utility cost is fixed or variable should be the long run, as I discuss below.

Q. Under Ameren's definition, are any of its gas distribution-related costs not fixed?

A. No. Ameren's COSS shows its total proposed revenue requirement is $343,728,700. Ameren Ex. 13.2G, line 31. Ameren then divides this amount by the average number of customers (and then by the 12 monthly bills per customer) to determine that the allegedly

[1] Edwin Mansfield, *Microeconomics: Theory and Application* (New York, 2nd Ed., 1975), p. 121.

fixed cost per customer is $34.89 on a total-company basis ($26.07 for residential customers). Id., line 37. On the following line in its study, it then calculates what it calls "Total fixed 80% recovery"; that is the recovery of 80% of so-called "fixed" costs through the customer charge, which is $27.91 on a total-company basis and $20.85 for residential (GDS-1) customers. In other words, Ameren has treated all of its costs as being fixed.

Q. Does the Company's claim that nearly all of its gas distribution costs are fixed mean that it costs about the same to serve large users and small users within the GDS-1 class?

A. No, that is definitely not the case. The Company's own data show that it incurs substantial costs related to the peak demand that each residential customer places on the system. These demand-related costs are apparent in the sizing of distribution mains, storage facilities, and other types of distribution facilities and related operations and maintenance costs. In other words, the Company incurs millions of dollars in costs each year that are directly related to the demands residential customers place on the system. These costs should be recovered from customers in proportion to the amount of natural gas that they use, particularly when that gas is used during the winter.

Q. Please be specific about the demand-related costs the Company incurs.

A. Ameren's COSS explicitly shows residential demand-related costs to be $107,174,100. Ameren Ex. 13.2G, line 5. If that cost were recovered from residential customers in

proportion to their annual consumption (that is, recovering the cost on a per-therm basis), the demand cost per therm would be 18.99¢ per therm.[2]

Q. Do you agree with the Company's focus on the short run to determine whether costs are fixed or variable?

A. No, I do not. It is not appropriate for setting utility rates or evaluating a utility's cost of service to focus on the short run. To the best of my knowledge, there is no support among reputable public utility economists or among public utility commissions for setting utility rates based on short-run marginal costs. This notion was floated by a few economists during the 1940s and 1950s and quickly was discredited by those who understood the public utility industry. The essential flaw in pricing utility distribution service based on short-run marginal cost is that the industry exhibits economies of scale (as one would expect from a natural monopoly). This means that the marginal cost declines as more of the product is supplied (at least up to some point). We see this in the price of nearly every component of the distribution system: for example, it does not cost twice as much to install a two-inch pipe as it does to install a one-inch pipe. Indeed, the cost increment often is relatively small compared to the increase in capacity. In an industry that exhibits economies of scale (that is, declining marginal costs for at least a portion of the supply curve), setting prices equal to short-run marginal cost results in the firm being unable to recover its costs. In an industry providing an essential public service

[2] GDS-1 demand-related cost of $107,174,100 divided by projected 2012 GDS-1 consumption of 564,240,421 therms, from Ameren Ex. 13.2G, line 34.

like natural gas distribution, this is simply untenable, as it would force the utility to go out of business, or at least to stop replacing and maintaining its facilities.

In the first edition of Professor Bonbright's seminal work, *Principles of Public Utility Rates*, published in 1961, he devotes an entire chapter to the theory of marginal cost pricing. One portion of that chapter (pages 395-399) is a section entitled: "Critique of Proposal to Fix Rates at Short-Run Marginal Cost." In his critique, Professor Bonbright explains that pricing based on short-run cost is inconsistent with the long-run time horizon and function of a public utility and the proper setting of utility rates. First, he explains that pricing based on short-run costs would violate consumers' expectations (one of his fundamental principles: rate continuity). Specifically, he writes:

> By and large, the major influence exercised on consumer demand for utility services by any current rates of charge for these services is an influence based on the expectation that these rates indicate, at least in a general way, the rates that will remain in effect over a considerable period of time. For it is the anticipated, fairly long-run costs of service which a potential consumer wisely takes into account when he faces a decision … whether to equip his home with an electric range or with electric space heating; or whether to locate his aluminum plant on the St. Lawrence River rather than in the state of Washington. Once having become dependent on the services required for the operation of expensive complementary equipment, the consumer's responsiveness to temporary changes in rates of charge will probably be very limited. In short, the price elasticity of demand for utility services can be expected to be much greater in the fairly long run than in the very short period of time. But if utility rates were to be made as volatile as would be required by the mandate of conformity to short-run marginal costs, they would deprive consumers of those expectations of "reasonable continuity" of rates and of rate relationships on which they must rely in order to make rational advance preparations for the use of service.[3]

[3] James C. Bonbright, *Principles of Public Utility Rates* (New York, NY 1961), pp. 396-397 (emphasis added).

Professor Bonbright also explains that short-run marginal cost pricing of utility services (because of the economies of scale) would require some type of payment to the utility to recover the remainder of its revenue requirement. Some economists suggested that a tax payment should be made while others suggested that a large fixed charge could be imposed by the utility. Professor Bonbright explained that such a charge or tax would be unfair to those who did not consume the product or who consumed relatively little of it. That unfairness is not just a social welfare concern, but a fundamental economic concern: requiring a non-user (or low user) of a service to subsidize the service for those who use it does not increase overall economic welfare; rather, it transfers the "consumer surplus" (that is, the benefits of a service in excess of the costs paid for the service) from one group of customers (the low users) to another group (the large users).[4]

Professor Robert Harbeson, an economist specializing in utility regulation at the University of Illinois starting in the 1950s (and to whom Bonbright cites) addressed this concern explicitly in a paper published in 1955.[5] Professor Harbeson discusses proposals to implement a two-part utility tariff consisting of a charge to "assess the portion of the costs which varied with output and would be based on marginal cost" and the second part that would "assess the portion of the costs which were independent of output" – that is, the type of tariff Ameren advocates in this case. Professor Harbeson explains that this type of two-part tariff would be reasonable only on one condition: "the individual's share of the fixed costs must be arrived at voluntarily on the basis of

[4] Id., p. 397.

[5] Robert W. Harbeson, A Critique of Marginal Cost Pricing, *Land Economics*, 31:1:54-74 (Feb. 1955).

individual negotiation; only in this way can we be certain that the contributions of the individual users toward the fixed costs do not exceed their respective estimates of the utility of the project to themselves, and hence that there has been an increase in welfare."[6]

Professor Harbeson recognized this would not be possible when there are a large number of users, but he explained that if the fixed-cost component is not individually negotiated, it would have the same economic effect as a tax: transferring consumer welfare from non-users (or low users) to large users of the service.[7] As he states: "a lump-sum tax is likely to exceed consumers surplus for some individuals and to fall short of consumer surplus for others and no conclusion can be reached as to whether or not welfare has been increased …"[8]

In short, economists considered and rejected Ameren's type of pricing proposal more than 50 years ago. Such a method of utility pricing is simply a method of transferring wealth (or consumer surplus) from one group of customers to another. There is no discernible increase in overall societal welfare and no improvement in the efficiency of use of the utility's service. In fact, such a pricing proposal could lead consumers and utilities to make decisions that are not in their long-run best interests. That is, indeed, a critical flaw in such a utility rate structure, since gas distribution service by its very nature is a long-run service.

[6] Id., p. 61.

[7] Id.

[8] Id., p. 60.

Q. What do you conclude?

A. I conclude that it is unreasonable and improper to treat most of Ameren's costs as "fixed" and to recover them on a per-customer basis. Ameren's own COSS shows that more than 45% of its cost of serving residential customers is related to those customers' demand for natural gas.

B. Residential Rate Design

Q. Please summarize your understanding of the Company's existing residential rate design.

A. Ameren's existing residential rates consist of a monthly customer charge and a per-therm distribution charge. As it does in electricity, Ameren has three rate zones for natural gas, corresponding to the separate companies that used to provide service before all the companies were combined under the Ameren Illinois name.

Rate Zone I has a customer charge of $19.31 per month and a per-therm distribution charge of $0.07724. Rate Zone II has a customer charge of $15.60 and a distribution charge of $0.05649 per therm. Rate Zone III has a customer charge of $19.57 and a per-therm charge of $0.07589.

Q. How is the Company proposing to recover its proposed increase in revenue requirement from residential customers?

A. Ameren is proposing to continue recovering approximately 80% of its residential cost of service through its customer charge. The resulting rates would be: Rate Zone I customer charge of $22.39 per month and a per-therm charge of $0.08971; Rate Zone II customer

charge of $18.41 and a charge of $0.07035 per therm; Rate Zone III customer charge of $22.01 and a per-therm distribution charge of $0.08982.

Q. Do you have any concerns with the structure of the Company's residential rates?

A. Yes, I do. I have serious concerns with the steady, non-cost-justified increase in the customer charge portion of the monthly bill over the Company's last couple of rate cases. This is based on Ameren's skewed definition of "fixed" costs, and the supposition that its delivery service costs are not affected by gas consumption. In fact, as I explained above, the Company's own COSS shows that there are substantial demand-related costs that are incurred because of the amount of gas consumed by customers.

Q. In the portion of your testimony addressing fixed costs, you discussed the magnitude of Ameren's demand-related costs. Do Ameren's proposed rates appropriately recover these demand-related costs from residential customers?

A. No. As I discussed above, Ameren is proposing per-therm distribution rates that are significantly less than the per-therm demand costs incurred to serve residential customers. Specifically, the demand cost is approximately 19 cents per therm, but Ameren is proposing distribution charges of between 7 and 9 cents per therm – or well less than one-half of the actual demand-related cost of service.

Q. How is Ameren proposing to recover these demand costs from customers?

A. Ameren is proposing to recover most of its demand-related costs on a per-customer basis.

Q. Is it reasonable to recover demand-related costs on an equal amount per customer?

A. No, it is not reasonable to recover demand-related costs on a per-customer basis. Doing so is inconsistent with the setting of cost-based rates for utility service. Ameren has tremendous diversity within its residential classes – ranging from customers who do not use natural gas for space heating (and thus place very low demands on the system) to those who use hundreds, or even thousands, of therms per month during the winter for space heating.

Q. What is the significance of the Company's proposal being contrary to the notion of setting cost-based rates?

A. Our system of establishing utility rates is based on a fundamental notion that rates should be "just and reasonable" and that rates should not improperly discriminate among customers; that is, that people should not be asked to pay different rates for the same service. In order to determine whether rates are just, reasonable, and not improperly discriminatory, we rely on information about the cost to serve different types of customers. If the rates are not more than the value of service to the customer, then we have some assurance that the rates are reasonable (that is, the customer is not being asked to pay more than the service is worth to him or her). If the rates are related to the cost of providing service, then we have some assurance that the rates are just or fair (that is, the utility is not being unjustly enriched at the expense of the customer). Finally, if differences in rates among different types of customers are related to differences in the

cost of providing service, then we have confidence that the rates are not improperly discriminatory.

To make these determinations, we rely on a COSS that identifies differences in costs to serve customers with different characteristics. In this case, Ameren prepared a COSS that identifies a significant cost-driver for residential customers: demand-related costs.

Demand-related costs account for approximately 45% of Ameren's total cost of serving residential customers ($107 million out of $235 million). But Ameren has proposed rates that do not recover these residential demand costs from the customers who cause them to be incurred (those customers who use more gas). Instead, Ameren is proposing to require low-use residential customers to provide substantial subsidies to high-use residential customers – charging higher-use customers less than one-half the demand cost that they impose on the system.

In my opinion, Ameren's proposal is contrary to established notions of fairness and non-discrimination in rate-setting. Ameren has identified the cost, but it is not proposing to set rates to fairly recover that cost from the customers who cause it. In my opinion, the rates proposed by the Company are highly discriminatory against low-use residential customers: requiring those customers to pay substantially more than the cost that is incurred to serve them.

Q. What do you conclude from these data?

A. I conclude that it is grossly unreasonable to recover most demand-related costs on a per-customer basis. Heating customers place dramatically larger demands on the system than do non-heating customers. Further, larger heating customers place greater demands on the system than smaller heating customers. Compare, for example, the demand for natural gas from a small apartment to the demand from a large single-family home that may be heating thousands of square feet.

Q. How do you recommend that residential rates should be designed?

A. As a transition to re-establishing cost-based residential rates, I recommend that any rate increase allocable to residential customers should be recovered solely from the per-therm distribution charge. There should not be any increase in the GDS-1 customer charges in this case.

Q. Have you prepared an example showing the effect of your recommendation?

A. Yes. AG/CUB Ex. 2.4 shows the residential rates I would recommend under Ameren's proposed revenue requirement. I have performed these calculations using the Company's proposed revenue requirements, so that my recommendations can be compared directly with Ameren's recommendations. This does not constitute an endorsement by me or the AG or CUB of Ameren's proposed revenue requirement. That exhibit also includes a proof of revenues showing that the rates I recommend would recover the same GDS-1 revenues as Ameren's proposed rates.

IV. Conclusion

Q. What do you recommend?

A. I recommend that the Commission adopt my proposed inter-class allocation for electric distribution service. I also recommend that the Commission adopt my proposed residential rate designs for both electric and natural gas distribution service.

Q. Does this conclude your direct testimony?

A. Yes, it does.